



THE WEIZMANN SCIENCE PRESS OF ISRAEL

National Council for Research and Development

ISRAEL **Journal of** **MATHEMATICS**

Volume 20
1975



מוסד ויצמן לפרסומים במדעי הטבע ובטכנולוגיה, ירושלים
THE WEIZMANN SCIENCE PRESS OF ISRAEL

Publishers of the following journals

ISRAEL JOURNAL OF BOTANY; ISRAEL JOURNAL OF CHEMISTRY;
 ISRAEL JOURNAL OF EARTH-SCIENCES; ISRAEL JOURNAL OF MATHEMATICS;
 ISRAEL JOURNAL OF TECHNOLOGY; ISRAEL JOURNAL OF ZOOLOGY;
 JOURNAL D'ANALYSE MATHÉMATIQUE

לרעת מדע לנוער המתבגר (SCIENCE FOR YOUTH)

בוק עתון מדעי לכל (SCIENCE)

Supporting Institutions

THE NATIONAL COUNCIL FOR RESEARCH AND DEVELOPMENT;
 BAR-ILAN UNIVERSITY; BEN GURION UNIVERSITY OF THE NEGEV;
 TECHNION — ISRAEL INSTITUTE OF TECHNOLOGY; TEL AVIV UNIVERSITY;
 THE HEBREW UNIVERSITY OF JERUSALEM; THE WEIZMANN INSTITUTE OF SCIENCE

GENERAL EDITORIAL BOARD

D. ABIR
 I. ARNON
 A. DVORETZKY
 H. EYAL-GILADI
 H. HANANI
 M. JAMMER
 J. JORTNER
 E. KATCHALSKI-KATZIR
 N. SHARON
 G. STEIN
 Y. WEILER
Executive Editor
 L. LESTER

**ISRAEL JOURNAL
 OF MATHEMATICS**

Formerly: Bulletin of The Research Council
 of Israel, Section F

Editorial Board

A. PAZY AND B. WEISS, *The Hebrew University
 of Jerusalem, Executive Editors*
 S. ABARBANEL, *Tel Aviv University*
 B. GRÜNBAUM, *University of Washington,
 Seattle, Wash., U. S. A.*
 I. N. HERSTEIN, *The Weizmann Institute of
 Science, Rehovot*
 A. LEVY, *The Hebrew University of Jerusalem*
 J. LINDENSTRAUSS, *The Hebrew University of
 Jerusalem*
 E. NETANYAHU, *Technion — Israel Institute of
 Technology, Haifa*

Three volumes of the Israel Journal of Mathematics are to be published in 1975,
 Vols. 20, 21, and 22.

Subscriptions were addressed to the Weizmann Science Press of Israel, P. O. B. 801, Jerusalem 91000 Israel. In Europe, orders may be sent to Wm. Dawson & Sons Ltd., Cannon House, Macklin Street, London, W. C. 2. Subscription fees per volume, U. S. \$24.00. Individual members of mathematical societies may subscribe through the Weizmann Science Press at a 50% discount, i. e., U.S. \$12.00.

© 1975 THE WEIZMANN SCIENCE PRESS OF ISRAEL

Printed in Israel

Jerusalem Academic Press

ISRAEL JOURNAL OF MATHEMATICS

TABLE OF CONTENTS, VOLUME 20, 1975

ALTSHULER, Z.	Uniform convexity in Lorentz sequence spaces	260
BENYAMINI, Y.	Near isometries in the class of L^1 -preduals	275
BIALOSTOCKI, A.	On products of two nilpotent subgroups of a finite group	178
BROWN, L. AND T. ITO	Some non-quasireflexive spaces having unique isomorphic preduals	321
BRUNEL, A. ET D. REVUZ	Sur la théorie du renouvellement pour les groupes non abéliens	46
COHEN, M.	Semiprime Goldie centralizers	37
COVEN, E. M. AND M. E. PAUL	Sofic systems	165
CRONE, L. AND W. ROBINSON	Diagonal maps and diameters in Köthe spaces	13
DAVIS, W. J.	Embedding spaces with unconditional bases	189
DUBINSKY, E.	Infinite type power series subspaces of infinite type power series spaces	359
HIRSCHFELD, J.	Models of arithmetic and recursive functions	111
ITO, T.	See L. Brown	
JOHN, K. AND V. ZIZLER	On the heredity of weak compact generating	228
JOHNSON, W. B. AND L. TZAFRIRI	On the local structure of subspaces of Banach lattices	292
KALF, H.	The quantum mechanical virial theorem and the absence of positive energy bound states of Schrödinger operators	57
KALTON, N. J. AND J. H. SHAPIRO	An F -space with trivial dual and non-trivial compact endomorphisms.	282
LAZAR, A. J.	Extreme boundaries of convex bodies in l_2	369
NIELSEN, N. J.	On the Orlicz function spaces $L_M(0, -\infty)$	237
ODELL, E. AND H. P. ROSENTHAL	A double-dual characterization of separable Banach spaces containing l^1	375
PAUL, M. E.	See E. M. Coven	
PAZY, A.	A class of semi-linear equations of evolution	23
PISIER, G.	Martingales with values in uniformly convex spaces	326

REVUZ, D.	<i>See</i> A. Brunel	
ROBINSON, W.	<i>See</i> L. Crone	
ROSENTHAL, H. P.	<i>See</i> E. Odell	
ROWEN, L. H.	Identities in algebras with involution	70
SCHECHTMAN, G.	Complemented subspaces of $(l_2 \oplus l_2 \oplus \cdots)_p$ ($1 < p < \infty$) with an unconditional basis	351
SHAPIRO, J. H.	<i>See</i> N. J. Kalton	
SHELAH, S.	Categoricity in \aleph_1 of sentences in $L_{\omega_1, \omega}(Q)$	127
SHELAH, S.	Colouring without triangles and partition relation	1
STAVI, J.	A model of ZF with an infinite free complete Boolean algebra	149
STERN, J.	Some measure theoretic results in effective descriptive set theory	97
STERNFELD, J.	Dimension theory and superpositions of continuous functions	300
SZANKOWSKI, A. AND M. ZIPPIN	A stability property of the unit vector basis of l^p	216
TZAFRIRI, L.	<i>See</i> W. B. Johnson	
WOO, J. Y. T.	On a class of universal modular sequence space	193
ZIPPIN, M.	<i>See</i> A. Szankowski	
ZIZLER, V.	<i>See</i> K. John	